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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2512	7590	08/20/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LI, SHI K	
			ART UNIT	PAPER NUMBER
			2633	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,369

Applicant(s)

BURNS ET AL.

Examiner

Shi K. Li

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaikuranta (U.S. Patent 6,373,046 B2) in view of Snyder et al. (U.S. Patent 6,501,581 B1).

Regarding claims 1 and 10, Kaikuranta discloses in FIG. 8 a cellular telephone with optical transceiver at the bottom of the cellular telephone for data communication between the mobile station (cellular telephone) and external equipment such as vehicular holders. Kaikuranta does not show the detailed structure of the holder and a data transmission element. However, such implementation details are well known in the art. For example, Snyder et al. teaches a mobile station stand in FIG. 8 and FIG. 9. One of ordinary skill in the art would have been motivated to combine the teaching of Snyder et al. with the mobile station of Kaikuranta as suggested by Kaikuranta because it enables the communication between the mobile station and external equipment without requiring a separate connector (see col. 4, lines 45-48 of Kaikuranta). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a mobile station stand with transmission element for communicating with external equipment, as taught by Snyder et al., in the mobile station of Kaikuranta because it enables the communication between the mobile station and external equipment without requiring a separate connector.

Art Unit: 2633

Regarding claims 2-4, Kaikuranta teaches in col. 1, lines 19-21 that ultraviolet, infrared and visible light can be used for the optical signal.

Regarding claim 16, Kaikuranta teaches in col. 4, lines 45-48 vehicular holder.

3. Claims 1-15, 17, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. (U.S. Patent 6,501,581 B1) in view of Nocker, IV (U.S. Patent 6,236,486 B1).

Regarding claims 1 and 10, Snyder et al. discloses in FIG. 2 and FIG. 3 an adaptor for a cellular phone (mobile station). The cellular phone has an optical port 36 for transmitting and receiving light signals via a data transmission element 96. The difference between Snyder et al. and the claimed invention is that the transmission element of Snyder et al. locates on the side of the cellular phone. Nocker, IV teaches in FIG. 2 an arrangement for providing a transmission means between a hand-held device and external equipment with an adaptor where the transmission link is located at the bottom of the hand-held device. One of ordinary skill in the art would have been motivated to combine the teaching of Nocker, IV with the cellular phone adaptor of Snyder et al. so that the optical port locates at the bottom because positioning the port at the bottom of the hand-held device simplifies the alignment between the hand-held device and the adaptor (see col. 5, lines 52-57 of Nocker, IV). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to position the optical port of the cellular phone at the bottom, as taught by Nocker, IV, in the cellular phone adaptor of Snyder et al. because positioning the port at the bottom of the cellular phone simplifies the alignment between the cellular phone and the adaptor.

Regarding claim 5, Nocker, IV teaches in col. 5, lines 45-46 to use transparent cover to protect the optical ports. With respect to the reflector, it is well known in the art that reflecting

Art Unit: 2633

means such as mirror can be used to guide optical signal to appropriate direction. For example, Snyder et al. teaches in FIG. 7 conical mirror 156 to reflect optical signal toward port 154.

Regarding claims 2-4, Snyder et al. teaches to use infrared light as well as light signals of other wavelengths capable of transmitting data (for example, see col. 6, lines 1-11).

Regarding claims 7, 12 and 13, Snyder et al. teaches in col. 7, lines 36-39 reflective surfaces.

Regarding claims 9 and 14, Snyder et al. teaches in FIG. 8 and col. 8, lines 42-43 another embodiment using optical fiber.

Regarding claims 6 and 11, instant application admits in page 7, lines 5-11 that optical signal propagates in optical fiber by refraction and such phenomena is well known to a person skilled in the art. Snyder et al. teaches in FIG. 8 and col. 8, lines 42-43 to use optical fiber for the transmission element. According to admission, optical signal propagates in the optical fiber mainly by refraction.

Regarding claim 15, Snyder et al. teaches in col. 6, line 21 a housing for supporting the adaptor on countertop or desk.

Regarding claim 17, Snyder et al. teaches in FIG. 8 an alternative adaptor for installation on a wall.

Regarding claim 19, Snyder et al. teaches in col. 10, lines 48-49 to use the adaptor for recharging a battery of the cellular phone.

Regarding claim 22, a cover inherently prevents foreign material from entering the channel.

Art Unit: 2633

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. and Nocker, IV as applied to claims 1-15, 17 and 19 above, and further in view of Muramatsu et al. (U.S. Patent 6,477,391 B1).

Snyder et al. and Nocker, IV have been discussed above in regard to claims 1-15, 17 and 19. The difference between Snyder et al. and Nocker, IV and the claimed invention is that Snyder et al. and Nocker, IV do not teach to use the stand in a car. Muramatsu et al. teaches in col. 4 lines 9-14 to use a cellular phone stand in vehicle for holding a cellular phone. One of ordinary skill in the art would have been motivated to combine the teaching of Muramatsu et al. with the modified mobile station stand of Snyder et al. and Nocker, IV because it is dangerous or prohibited by law for a car driver to hold a cellular phone while driving, and a mobile station stand allows the driver to use a mobile phone hand-free. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the modified mobile station stand of Snyder et al. and Nocker, IV in cars, as taught by Muramatsu et al., because it is dangerous or prohibited by law for a car driver to hold a cellular phone while driving, and a mobile station stand allows the driver to use a mobile phone hand-free.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. and Nocker, IV as applied to claims 1-15, 17 and 19 above, and further in view of Hirai et al. (U.S. Patent 6,084,963).

Snyder et al. and Nocker, IV have been discussed above in regard to claims 1-15, 17 and 19. The difference between Snyder et al. and Nocker, IV and the claimed invention is that Snyder et al. and Nocker, IV do not teach a protective casing for the stand. Hirai et al. teaches in FIGs. 1-3 a phone holder for connecting to a phone and protecting the phone. As illustrated in

Art Unit: 2633

the figures, the holder surrounds the phone and protects it from external stress. One of ordinary skill in the art would have been motivated to combine the teaching of Hirai et al. with the modified mobile station stand of Snyder et al. and Nocker, IV because mobile phones are light-weight and made of fragile material, and need protection while it is not being held by hand.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a protective casing for the mobile station stand, as taught by Hirai et al., in the modified mobile station stand of Snyder et al. and Nocker, IV because mobile phones are light-weight and made of fragile material, and need protection while it is not being held by hand.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. and Nocker, IV as applied to claims 1-15, 17 and 19 above, and further in view of Panton (U.S. Patent 5,519,527).

Snyder et al. and Nocker, IV have been discussed above in regard to claims 1-15, 17 and 19. The difference between Snyder et al. and Nocker, IV and the claimed invention is that the modified cellular phone adaptor of Snyder et al. and Nocker, IV use one transmission element while the claimed invention uses two transmission elements. Panton teaches in FIG. 5 an infrared communication arrangement where an electronic equipment 4 and an interface unit communicate over two transmission elements between devices 10 and 30 and between devices 14 and 34. One of ordinary skill in the art would have been motivated to combine the teaching of Panton with the modified cellular phone adaptor of Snyder et al. and Nocker, IV because separating the transmission paths of the signals to and from the cellular phone avoids interference between the light signals. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to have two transmission elements, as taught by

Art Unit: 2633

Panton, in the modified cellular phone adaptor of Snyder et al. and Nocker, IV because separating the transmission paths of the signals to and from the cellular phone avoids interference between the light signals.

7. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al., Nocker, IV and Panton as applied to claim 20 above, and further in view of Iroue et al. (U.S. Patent 6,188,495 B1).

Snyder et al., Nocker, IV and Panton have been discussed above in regard to claim 20. The difference between Snyder et al., Nocker, IV and Panton and the claimed invention is that Snyder et al., Nocker, IV and Panton do not teach a wall or divider to separate the outgoing and incoming signals. Iroue et al. teaches in FIG. 1 to use a wall 109 to separate incoming and outgoing signals in a transceiver. One of ordinary skill in the art would have been motivated to combine the teaching of Iroue et al. with the modified cellular phone adaptor of Snyder et al., Nocker, IV and Panton because it prevents leaking of optical signal from one channel to the other in a transceiver using two transmission elements (see col. 1, lines 33-34 of Iroue et al.). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a wall or divider to separate incoming and outgoing signals in a transceiver, as taught by Iroue et al., in the modified cellular phone adaptor of Snyder et al., Nocker, IV and Panton because it prevents leaking of optical signal from one channel to the other in a transceiver using two transmission elements.

Response to Arguments

8. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2633

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 703 305-4341. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 703 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

skl



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